

SVL), so it survived 4 winters and was at least 4 years old.

On 14 June 1999, we captured a 49 mm SVL female, making it sexually mature because it exceeded the minimum female adult size (41.5–43 mm SVL; Selcer, *op. cit.*; Punzo, *op. cit.*). Because female *H. turcicus* also reach sexual maturity 8–9 months after hatching (Selcer, *op. cit.*; Punzo, *op. cit.*; pers. obs.), this female must also have hatched during or prior to the summer of 1998. We recaptured this female on 2 June 2002 (57 mm SVL), so it also survived 4 winters and was at least 4 years of age.

Longevity of these two *H. turcicus* exceeds the 3 year lifespan proposed by Selcer (*op. cit.*). Both were among the largest lizards we caught when they were captured in 2002, implying that 4 years might approach the maximum lifespan for this species.

Lizards were collected under the authority of Louisiana Department of Wildlife and Fisheries Scientific Collecting Permits LNHP-99-019 and LNHP-02-018 issued to Mark A. Paulissen.

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IGUANA IGUANA (Sinimbu, Green Iguana). **REPRODUCTION.** The iguanid *Iguana iguana* has a broad geographic distribution across Central and South America. In most South American countries, iguanas have significant socioeconomic importance in rural communities as a food resource (Divers 1995. Brit. Herpetol. Soc. Bull. 51:6–26). In Brazil, where the sinimbu has a distribution through the Amazon, the Pantanal and Caatinga, no information exists on the biology of the species in the wild. Here, I provide preliminary data on nests, nest colonies, densities, and reproduction for *I. iguana* from Pantanal habitat in southern Brazil.

This study was conducted on Paraguay River near the city of Corumbá, Mato Grosso Sul (18°59'S, 56°39'W; elev. 60 m) in November–December 1992, when iguanas lay eggs. Nests colonies were located, and I opened intact nests in order to count eggs and measure the dimensions (length and width) of 8–19 egg samples. I also captured females near the nests, measured them (SVL), and assessed their reproduction condition (gravid or not). I considered females gravid if they had an expanded abdominal cavity and had excavated nests, and non-gravid if they had a deflated abdominal cavity and were located within nest holes. Between 0900 and 1200 h on 18–20 January 1994, I also conducted an iguana census by boat that covered both banks of two stretches of the Paraguay River. Each stretch covered 4 km.

I located 6 groups of nests 3 to 300 m apart and a total of 18 nests over a 2-km length of river. Nests were located in clay river banks in open habitat within 3 m of the river margin. I saw females excavate nest holes with both their limbs and their mouth. At each nest group, nest holes were within 50 cm of one another. Each nest group had 3 nests with eggs; the remaining excavated holes appeared empty. Ten nests were predated, the other 8 were intact. Clutch size of intact nests averaged 14 (SD = 3.2, range: 12–19)

and eggs averaged slightly over 1.4 times as long as wide (mean length 42.6 mm, SD = 1.7 mm; mean width 29.7 mm; SD = 1.3 mm). The vicinity of nests had many predated or rotten eggs. I observed Yellow Anacondas (*Eunectes notaeus*) three times near nests: twice with *I. iguana* eggs in their mouths and once in a hole near a nest colony. I captured 8 reproductive age female iguanas (4 gravid and 4 that had recently deposited eggs). These females were 31.0–39.5 cm SVL (mean 33.5 cm SVL, SD = 2.6 cm). During the riverbank survey, I recorded 3.5 iguanas/km in one stretch of the river, and 2.0 iguanas/km in other.

The aggregative behavior I describe for nesting *I. iguana* females along the banks of Paraguay River at the end of the dry season is similar to aggregative behavior for reproduction that has been observed on Barro Colorado Island in Panama, and in Venezuela (Rand 1968. Copeia 1968:837–842; Rodda and Grajal 1990. Amphibia-Reptilia 11:31–39). Aggregation might help maintain nest temperatures or facilitate defense against egg predators (Greene et al. 1978. J. Herpetol. 12:169–176). The dry-season nesting interval for iguanas in Panama (Rand 1972. Herpetologica 28:252–253) coincides with the seasonal pattern in the Pantanal. The clutch sizes of 12–19 I report for the Pantanal are generally smaller than most other reports. In Surinam, clutch size varied from 24 to 57 (Hoogmoed 1973. Biogeographica: Notes on the Herpetofauna of Surinam IV 4:419); in Panama from 9 to 71 (Rand 1984. Vertebrate Ecol. Syst. 10:115–122); and in Colombia from 14 to 70 (Muller 1972. Zoologische Beiträge NF 18:109–131). Generally lower clutch sizes might reflect the range margin conditions of my study areas.

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LEIOCEPHALUS CARINATUS ARMOURI (Northern Curly-tailed Lizard). **PREDATION.** Indigenous species preying on exotic herpetofauna in Florida might be an important source of mortality (Butterfield et al. 1997. In Simberloff et al. [eds.], Strangers in Paradise, pp. 123–138, Island Press, Washington, DC). The Little Blue Heron (*Egretta caerulea*) feeds mainly on small fish, invertebrates (mostly crustaceans), and small amphibians (Rodgers and Smith 1995. In Poole and Gill [eds.], The Birds of North America, Species Account No. 145, The Academy of Natural Sciences, Philadelphia, Pennsylvania and The American Ornithologists' Union, Washington, DC). Here, we report an observation of predation by the Little Blue Heron on *Leiocephalus carinatus armouri*, an exotic species in Florida (Weigl et al. 1969. Copeia 1969:841–842).

At ca. 1325 h on 19 February 2003, a hazy-sunny day with a temperature ca. 27°C, HTS observed a juvenile (white plumage) Little Blue Heron prey on a small (4–5 cm SVL) *L. c. armouri* on a concrete seawall in Martin County. This site is adjacent to the 1999 county record location (Hauge and Butterfield 2000. Herpetol. Rev. 31:53), but has been occupied since at least 1994 (Smith and Engeman 2002. Florida Field Nat. 30:132–133) and is at the northern end of a relatively contiguous 90 km surveyed range of this species (Smith et al., *in press*. International Biodeterioration and Biodegradation). The heron was foraging on top of the seawall using the "walk slow" behavior (Rodgers 1983. Colonial

Waterbirds 6:11–23), when it saw the lizard (also on top of the seawall) dart into a vertical crevice. In 10–15 seconds of slow approach, the heron waved its head and neck slowly in a wide side to side sweep. When it reached a position over the crevice, the heron plucked the lizard out with one strike and swallowed it in < 10 sec.

The event was noteworthy because it involved a juvenile wading bird foraging in a terrestrial situation and preying on the exotic *L. c. armouri*. Although the Little Blue Heron occasionally hunts on land, most time is spent methodically foraging in shallow water (Willard 1977. Condor 79:462–470; Rodgers and Smith, *op. cit.*). Although herons and egrets have been known to capture and consume exotic lizards in terrestrial situations (Franz 2001. Herpetol. Rev. 32:253), and *L. carinatus* has been the subject of other unusual predation events (Smith and Engeman, *in press*. Herpetol. Rev.), we know of no similar wading bird depredation reports for *L. carinatus* in the literature.

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LEPIDOPHYMA FLAVIMACULATUM (Yellow-Spotted Night Lizard). **PLACENTOPHAGIA**. Placentophagia (consumption of placental tissues) is known from among a few of the live-bearing lizards that exhibit placental development, namely the Australian scincid genera, *Egernia* and *Tiliqua* (Greer 1990. The Biology and Evolution of Australian Lizards. Surrey Beatty & Sons, Sydney, 264 pp.), and the xantusiid *Xantusia vigilis* (Bellairs 1969. The Life of Reptiles. Vol. 2. The Weinfeld and Nicolson Natural History, London, United Kingdom, 307 pp.). Here, I augment the scarce data on placentophagia in squamates with observations of this behavior in the Neotropical xantusiid *Lepidophyma flavimaculatum*.

During June 2002, each of two female *L. flavimaculatum* of uncertain origin gave birth to 9 young. One captive for over a year, had never been in contact with a male. The second was gravid when acquired, and gave birth eleven days later. Parturition allowed opportunity to observe placentophagia. One of the first female's newborn pulled out the remains of unidentified extra-embryonic tissues joined by the umbilical cord to its abdomen, then ate it. The other neonates from each of the two females or the females themselves may have done the same because each was devoid of extra-embryonic tissue remains when I first had the opportunity to observe each one and no evidence of extra-embryonic tissues was found in the terrarium.

Placentophagia reported in *Xantusia vigilis* involves the female (Bellairs, *op. cit.*). Only in the two Australian scincid genera *Egernia* and *Tiliqua* was placentophagia performed by neonates (Greer, *op. cit.*), so behavior might be more widespread among scincomorph lizards. Field data will be required to determine whether the neonate placentophagia observed here is typical or just a function of captive conditions. Litters of *L. flavimaculatum* vary from 2 to 6 (Telford and Campbell 1970. Copeia 1970:379–381), so the two clutch sizes of 9 are high, but this could also be a

function of available food in captivity. Lastly, unless *L. flavimaculatum* has the capability of storing sperm for an extended period of time, the females on which I report here might be derived from one or two of several parthenogenetic populations in Costa Rica or Panama (Telford and Campbell, *op. cit.*; Bezy 1972. Contr. Sci. Nat. Hist. Mus. Los Angeles 277:1–29).

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LEPOSTERNON MICROCEPHALUM (NCN). PREDATION.

Data about the natural history of South American amphisbaenids are scarce, reflecting their fossorial habits (Dunham et al. 1998. In Gans and Huey [eds.], Biology of the Reptilia, Volume 16 (Ecology B): Defense and Life History, pp. 441–522. Alan R. Liss, Inc., New York). In particular, few data exist on the predators of *Leposternon microcephalum*, an amphisbaenid widely distributed across South America (Peters and Donoso-Barros 1970. U. S. Nat. Mus. Bull. 297: 293 pp.). Fossorial snakes of genus *Micrurus* and some elapomorphines seem to be important predators of the amphisbaenid genus *Leposternon*, but some bird and mammal predators have also been reported (Marques and Sazima 1997. Herpetol. Nat. Hist. 5:88–93; Zamprogno and Sazima 1993. Herpetol. Rev. 24:82–83). As the omnivorous South American coati (*Nasua nasua*: Procyonidae) is not among reported predators, we report coati predation on *L. microcephalum*.

During a herpetological survey in the conservation area of Parque Florestal do Rio da Onça, Matinhos Municipality, Paraná, Brasil (25°45'–25°50' S; 48°30'–48°35' W; Coastal Atlantic Forest, restinga habitat) from April 1999 to April 2000, we observed a free-ranging but human tolerant 1-year old female *N. nasua* preying on *L. microcephalum* 17 different times. Each *L. microcephalum* was located by sniffing the litter or sand substrate (a behavior that *Nasua narica* displays constantly; Kaufmann 1962. Univ. California Publ. Zool. 60: 95–222), digging with the snout, capturing the prey with mouth and forepaws, and ingesting it in pieces immediately after the capture. Only 4 of 17 *L. microcephalum* were completely eaten. The other 13 were abandoned after being partially eaten, and are deposited in the herpetological collection of Museu de História Natural Capão da Imbuia, Curitiba, Paraná, Brasil (MHNCI 9688–9694, 9705–9710). In four of these individuals, the head and anterior part of the trunk were eaten; in seven others, the posterior third of the body was eaten; both ends of remaining two were eaten.

Nasua nasua has a broadly generalized diet that include flowers, fruits and small invertebrates often taken from epiphytic bromeliads or on the ground (Beisiegel 2000. Braz. J. Biol. 61: 689–692) as well as anurans and crustaceans (M. Oliveira, E. R. Ribas, pers. obs.). A crab-eating fox (*Cerdocyon thous*) was the only mammal reported to prey on the related *Leposternon wuchereri* (Zamprogno and Sazima, *op. cit.*), but this is the first record of *N. nasua* predation on any amphisbaenid.

The Ambiental Institut of Paraná provided the permit to Mitzi Oliveira that enabled survey in the Parque Florestal do Rio da Onça conservation area.